Response to Comments

Proposed 8-hour Ozone Maintenance Plan Section IX, Part D and Associated Rule Revisions

Commenters on the 8-hour Ozone Maintenance Plan and Associated Rules

EPA Kennecott KraftMaid Wasatch Clean Air Coalition

Comments on Proposed Rule Revisions

R307-101-2, Definitions

Comment #1: The current rule makes it clear that all of Salt Lake County is included [in the SO₂ maintenance area], but only the elevated part of the east side of Tooele County is included. It seems that the proposed wording leaves it uncertain what "above 5600 feet" modifies – just the eastern portion of Tooele County (as DAQ apparently intends), or that plus Salt Lake County. To ensure that it is clear that all of Salt Lake County will no longer be considered nonattainment for SO₂ (after EPA approves the SO₂ Maintenance Plan), KUCC suggests the phrase "All of" be inserted before the phrase "Salt Lake County" in the proposed change to R307-101-2. [Kennecott Utah Copper Corporation]

Staff response. Staff agree. The following changes are made in the rule text.

R307-101-2(d). Definitions.

"Maintenance Area" means an area that is subject to the provisions of a maintenance plan that is included in the Utah state implementation plan, and that has been redesignated by EPA from nonattainment to attainment of any National Ambient Air Quality Standard.

- (a)
- (b)
- (c)
- (d) The following area is considered a maintenance area for sulfur dioxide: <u>all of Salt Lake County</u> and the eastern portion of Tooele County above 5600 feet, effective on the date that EPA approves the maintenance plan that was adopted by the Board on January 5, 2005.

R307-320. Ozone Maintenance Areas and Ogden City: Employer-Based Trip Reduction Program.

Comment #2: In other proposed rules, the phrase, "Salt Lake & Davis Counties" has been changed to "Ozone Maintenance Areas." In R307-320-4 (3)(b)(ii), you have kept "Salt Lake & Davis Counties." Additionally, R307-320-4(3) (e) states that the "executive secretary shall approve....;" however, in other rules, the word "shall" has been changed to "will." [Wasatch Clean Air Coalition]

Staff response: Staff agree. The following changes are made in the rule text.

R307-320-4. Employer Requirements.

. . .

(3) Each employer shall design and submit to the executive secretary an approvable trip reduction plan for each work site to meet the target drive-alone rate as specified by the target drive-alone rate schedule in R307-320-3.

..

- (b) The trip reduction plan submittal shall adhere to the following schedule:
- (i) Submittal of a trip reduction plan shall be annually on or before the anniversary of the initial due date.
- (ii) For employers within [Salt Lake and Davis Counties] ozone maintenance areas:

. . .

(e) An approvable plan shall contain all the information required in R307-320-4. The executive secretary [shall]will approve or request revision of the trip reduction plan within 60 days of the plan submittal.

. . .

R307-325, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Ozone Provisions.

Comment #3: Proposed deletion of generic RACT provisions from prior version "R307-325-2 Existing Sources": While EPA said these provisions were not required as part of the 1-hour ozone SIP, EPA did approve them into the SIP. Thus, the State will need to demonstrate that deletion of these provisions will not interfere with attainment, maintenance, or any other requirement of the CAA, per section 110(1) of the CAA. If all sources potentially subject to the rule were controlled through adoption of specific RACT provisions, this demonstration would consist of a simple certification to that effect. Please note that any analysis should consider pollutants other than ozone, such as PM₁₀ and PM_{2.5}. [EPA]

Staff response. The generic RACT provisions in R307-325 describe Utah's initial approach to address RACT for the ozone maintenance plan. EPA did not accept this approach, and so source-specific VOC RACT determinations were made for major VOC sources. Source-specific NO_x RACT determinations were made for two major NO_x RACT sources and a NO_x RACT waiver was granted for all remaining sources. The generic RACT provisions in R307-325 have never been applied to any source, and deletion of the language will not interfere with attainment, maintenance, or any other requirement of the CAA. The State of Utah certifies that that all sources potentially subject to this rule were controlled through source-specific RACT determinations, or were addressed by the NO_x RACT waiver that was granted in 1997.

Comment #4: This language (in R307-325) confused me; it seemed to imply that the purpose of RACT was to result in evaporation. Possibly it would be clearer if changed to "...result AFTER the application of..." from "...result from the application..." [Wasatch Clean Air Coalition]

Staff response. Staff agree. See modified rule text below.

R307-325-3. Definition and General Requirement.

No person shall allow or cause [volatile organic compounds] VOCs to be spilled, discarded, stored in open containers, or handled in any other manner that would result in greater evaporation of VOCs than would have occurred if reasonably available control technology (RACT) had been applied. [, which would result in evaporation in excess of that which would result from the application of control technology that is reasonably available considering technological and economic feasibility.]

Comment #5: In the last sentence which states "...control technology that is reasonably available considering technological and economic feasibility." It would be more appropriate to state instead "...reasonably available control technology (RACT)," as this is the term used in the CAA. [**EPA**]

Staff response. Staff agree. See response to comment #4 above.

Comment #6: Several staff members have commented that although Utah rule requires sources with VOC contaminated rags to keep such rags covered, transporters and launderers of these VOC-laden rags are not required by rule to keep them covered. Please add language that clarifies that transport & laundering of VOC laden rags is subject to the Ozone Provisions. [Wasatch Clean Air Coalition]

Staff response. The ozone RACT rules have been an effective part of the overall plan to bring the area into attainment. If future ozone problems occur then all of the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

R307-326, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Control of Hydrocarbon Emissions.

Comment #7: This requirement contains no provision for updating the procedure for minimizing VOC emissions during turnarounds. If the procedure is to be maximally effective, it should be reviewed and updated regularly. Significant equipment and procedural changes have taken place since 1990, and any plan prepared then is outdated and likely not useful. Besides being outdated, the lack of reporting requirements could lead a source to believe complying with the procedure is voluntary. Please insert appropriate updating & reporting requirements into this provision. [Wasatch Clean Air Coalition]

Staff response. The ozone RACT rules have been an effective part of the overall plan to bring the area into attainment. If future ozone problems occur then all of

the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

Comment #8: To make certain that the rule is not mistakenly applied to a copper refinery; KUCC suggests that DAQ add the word "petroleum" before the word "refinery" in the rule title, and before the word "refinery" in the rule purpose and applicability sections of R307-326. [Kennecott Utah Copper Corporation]

Staff response. Staff agree. The following changes are made in the rule title and text.

R307-326. Ozone Nonattainment and Maintenance Areas: Control of Hydrocarbon Emissions in <u>Petroleum</u> Refineries. R307-326-1. Purpose.

The purpose of R307-326 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for the control of hydrocarbon emissions from <u>petroleum</u> refineries that are located in ozone nonattainment and maintenance areas. The rule is based on federal control technique guidance documents.

R307-326-2. Applicability.

R307-326 applies to the owner or operator of any <u>petroleum</u> refinery located in any ozone nonattainment or maintenance area.

Comment #9: R307-326- 10(3): In order to fulfill the requirements of R307-326- 10(1), the first sentence should be changed to read ". . . or approved by the Executive Secretary after obtaining concurrence from EPA." [**EPA**]

Staff response. R307-326-10(1) describes the process that must be followed before a source could use alternate monitoring methodology, including a requirement for EPA concurrence. It is not necessary to repeat these requirements in R307-326-10(3). The current language was approved by EPA and has been effective.

Comment #10: This rule makes frequent and interchangeable use of "volatile organic compound" and "VOC." Readability and clarity would be improved if VOC were used consistently after the initial volatile organic compound (VOC). [Wasatch Clean Air Coalition]

Staff response: Staff agrees and made the changes throughout R307-326, R307-340 and R307-343.

R307-327, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Petroleum Liquid Storage.

Comment #11: To make certain that the rule is not mistakenly applied to a copper refinery; KUCC suggests that DAQ add the word "petroleum" before the word "refinery" everywhere it occurs in the proposed Purpose and Applicability sections of R307-327. [Kennecott Utah Copper Corporation]

Staff response. Staff agree. The following changes are made in the rule title and text.

R307-327-1. Purpose.

The purpose of R307-327 is to establish Reasonably Available Control Technology (RACT), as required by section 182(2)(A) of the Clean Air Act, for petroleum_refineries and petroleum liquid storage facilities that are located in any ozone nonattainment or maintenance area. The rule is based on federal control technique guidance documents.

R307-327-2. Applicability.

R307-327 applies to the owner or operator of any <u>petroleum</u> refinery or petroleum liquid storage facility located in any ozone nonattainment or maintenance area.

R307-340, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Surface Coating Operations

Comment #12: Several rules reference EPA Guidance documents, for example, "EPA-340/1-88-003, Recordkeeping Guidance for Surface Coating Operations and the Graphic Arts Industry" in R307-340-4(2)(a)(v). These guidance documents cannot be located on the DAQ website, nor are they linked to a site where they are posted, as federal rules are. Compliance and citizen involvement would be easier if these documents were easily located on the DAQ website.

[Wasatch Clean Air Coalition]

Staff response. Staff agree. When EPA guidance documents are referenced in the ozone RACT rules, a link to the documents will be included on UDAQ's web page.

R307-343, Davis and Salt Lake Counties and Ozone Nonattainment Areas: Emissions Standards for Wood Furniture Manufacturing Operations. Comment #13: R307-343-9(1) requires sources subject to R307-343 to follow the reporting requirements of 40 CFR Part 63, Subpart A, the general provisions of the federal Maximum Achievable Control Technologies (MACT) rule, which regulates hazardous air pollutants. KraftMaid is not subject to the MACT rule, and this reference is confusing. R307-343 already requires all the reports that are required by Subpart A, except for submittal of a compliance certification. We recommend that R307-343-9(1) be deleted, and that the requirement for a compliance certification be added to R307-343-6(4)(c).[KraftMaid a company that will begin operation early in 2007 in Salt Lake County. It is the first wood furniture manufacturer in Utah to use a control device to comply with R307-343.]

Staff response. Staff agree. The following changes are included in the rule text.

R307-343-6(4): (c) Each owner or operator of an affected source subject to the provisions of R307-343-4 that complies using a control system, capture device or control device shall demonstrate continuous compliance by installing, calibrating, maintaining, and operating the appropriate monitoring equipment according to manufacturer's specifications.

- (i)...
- (ii)...
- (iii)...
- (iv)...
- (v)...
- (vi)...
- (vii) The owner or operator shall submit a compliance certification with the semiannual report required by R307-343-9(3).
- (A) The compliance certification shall state that, during the semiannual reporting period, the monitoring plan has been followed and the operating requirements included in the monitoring plan have been met. If the plan has not been followed, or the operating requirements have not been met, the compliance certification shall identify the dates of noncompliance and the reasons for noncompliance.
- (B) The compliance certification shall be signed by a responsible official.

R307-343-9: (1) [The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214-2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference.]

Comment #14: The title of R307-343 is *Ozone Nonattainment and Maintenance Areas: Emission Standards for Wood Furniture Manufacturing Operations*, while R307-343-2, applicability, indicates the rule is applicable to sources ...*located in*

any ozone nonattainment **or** maintenance area. Why are they different? [**KraftMaid**]

Staff response. In the title of the rule, and is appropriate, because the rule is intended to regulate emissions in all areas where compliance with the ozone standard is difficult--that is, all ozone nonattainment and maintenance areas. R307-343-2 stresses that the rule applies to any individual source that is located in any nonattainment or maintenance area. However, to improve clarity, R307-343-1 is revised as follows:

R307-343-1: The purpose of R307-343 is to limit volatile organic compound emissions from wood furniture manufacturing sources located in any ozone nonattainment or maintenance area[s].

Comment #15: R307-343-6(3)(d) still requires submittal of an initial compliance status report, though R307-343-9(2), which specifies the timetable to submit the report, is proposed for deletion. The new R307-343-9(2) addresses the semi-annual report, not the initial compliance status report. In addition, R307-343-10(2) requires submittal of the initial compliance status report within 60 days of initial startup. Because we are using a control device to comply, our Approval Order allows us up to 180 days to test the device, and we may have trouble complying within 60 days. We recommend that the deadline be extended to 180 days. [KraftMaid]

Staff response. Staff agree. Note that the compliance procedures for sources using a control device are specified in R307-343-6(2)(b), while procedures for other sources are found in R307-343-6(2)(a). R307-343-9(1) is revised to address the initial compliance status report:

R307-343-9: (1) [The owner or operator of an affected source using a control system to fulfill the requirements R307-343 is subject to R307-214-2(1) in which the reporting requirements of 40 CFR Part 63, subpart A are incorporated by reference.] The owner or operator of any new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(a) shall submit an initial compliance report within 60 days of initial startup. The owner or operator of a new source subject to R307-343 that complies using the procedures established in R307-343-6(2)(b) shall submit an initial compliance report within 180 days of initial startup. Each initial compliance report shall include the items required by R307-343-6(3).

Comment #16: The new R307-343-10(2) requires that the work practice implementation plan be submitted within 60 days of initial startup, while R307-343-6(3)(d) requires that the initial compliance status report state that the plan has been developed and implemented. Also, R307-343-5(1)(a) requires that the plan be available for inspection at all times, and that the executive secretary can require that

the plan be modified if it does not adequately address the requirements of R307-343-5. We recommend that the requirement to submit the initial work practice implementation plan be submitted within 60 days be dropped. [**KraftMaid**]

Staff response. Staff agrees that requiring the plan to be submitted within 60 days does not add much value; DAQ staff will inspect the new source regularly and can review the plan at that time.

In reviewing this comment, staff believe that all of R307-343-10(2) can be deleted, as the initial compliance status report addressed in R307-343-10(2)(b) is now addressed in R307-343-9(1). The purpose of R307-343-10 is to set a deadline for sources that are located in an area that is designated nonattainment in the future, not to address sources that newly locate into an area that is already designated nonattainment or maintenance.

R307-343-10. [(1)—]All sources within any newly designated nonattainment area for ozone shall be in compliance with this rule within 180 days of the effective date of designation to nonattainment.[(2)—New sources shall submit the following compliance documentation within 60 days of initial startup: (a) Workplace practice implementation plan as required in R307-343—5(1)(a); and (b)—Initial compliance documentation as required in R307-343—6(3).]

Other Comments about Rule Revisions

Comment # 17: R307-327-7(3), R307-328-8(3), R307-335-7(3), R307-340-16(3), R307-342-7(3): Same comment for all; the first sentence should be changed to read ". . . or approved by the Executive Secretary after obtaining concurrence from EPA." [**EPA**]

Staff response. See response to comment #9. In all these rules the process that must be followed, before a source could use alternate monitoring methodology, is described in an earlier paragraph. It is not necessary to repeat the reference to EPA concurrence again. The current language was approved by EPA and has been effective.

Comment #18: Comment on rules regarding potential alternative requirements or deadlines: There are various instances in which the RACT rules allow sources to implement alternative requirements or to meet different deadlines with the executive secretary's or Board's approval. See, for example, R307-326-4(3), -6(3), -7, -9(1), -9(5)(a), 10(2); R307-327-4(1), -6(1)(a) and (c), -6(3)(d), -7(2); R307-328-4(6) and (9), -6(4), -8(2); and similar provisions in the other RACT rules. We recognize that this language appears in the existing EPA-approved SIP. However, as you know, we have expressed concern to State management and staff regarding these types of provisions within the Utah SIP and our belief that these

provisions should be modified or removed. Because the Board will already be considering changes to these rules, we think it would be an appropriate time for the Board to rectify these problems in these rules. One possible approach would be to add language providing an approval or concurrence role for EPA. This would be consistent with some of the language regarding "alternate methods of control" that is already part of the EPA-approved SIP. For example, see the language in R307-326-10(1). If these rules are submitted to us without the requisite changes, we may be unable to act on them or approve them. [**EPA**]

Staff response. As explained in the comment, these requirements are part of the approved SIP. The ozone RACT rules have been in place, and have effectively reduced VOC emissions since the early 1980's. The provisions to allow sources to implement alternate requirements or to meet different deadlines are important to allow flexibility. These provisions have not been misused during the last 25 years. An extra layer of review would provide no additional air quality benefit.

Responses to EPA Comments on 8-hr Ozone Maintenance Plan

Comment #1: Page 1, footnote 1: There is a typographical error - the correct date for the referenced EPA guidance document is May 20, 2005 and not May 30, 2005.

Staff response. Staff agree. The date has been changed to May 20, 2005

Comment #2: Page 5, paragraph under "Point Source Emissions." This paragraph needs to be clarified: The third sentence indicates that "The 2002 emissions inventory for stationary point sources is based on actual activity levels during the peak ozone season and reflects estimated actual emissions."

We suggest the State supplement this statement by using information from the first paragraph of section 3.3.1 of the TSD, which further describes that actual annual emission inventory data were used from applicable facilities (to meet the triennial emissions reporting requirement of EPA's Consolidated Emissions Reporting Rule or CERR) and that these emission figures were then converted from tons per year to tons per day along with the application of rule effectiveness.

Staff response. Staff agree. The paragraph under "Point Source Emissions" on page 5 has been changed to read:

... The 2002 emissions inventory for stationary point sources is based on actual activity levels during the peak ozone season and reflects estimated actual emissions. Actual annual emission data were used from applicable facilities to meet the triennial emissions reporting requirement of EPA's Consolidated

Emission Reporting Rule (CERR). These emissions were then converted from tons per year to tons per day and adjusted to reflect current rule effectiveness.

Comment #3: Page 9, Figure 3: Typographical error in the title - 2018 should be 2014.

Staff response. Staff agree. The title of figure 3 has been changed to 2014.

Comment #4: Page 10, Figure 5: Typographical error in the title — 2018 should be 2014.

Staff response. Staff agree. The title of figure 5 has been changed to 2014.

Comment #5: Page 16, Section 5.a: The introductory statement reads, "The State certifies that all existing RACT controls required in the 1981 Ozone SIP and 1-hour maintenance plan dated September 9, 1998 will remain in effect after approval of this SIP revision." Similarly, referring to the NO_x RACT requirements for utility boilers in the September 9, 1998 1-hour maintenance plan, the introductory language under Section 5.b reads, "These same requirements remain in place and are valid for the 8-hour standard."

Subsequent language under Sections 5.a and 5.b seems to undercut these clear statements. For example, for Hill Air Force Base EPA approved various approval orders into the SIP to ensure that RACT for the base would be enforceable. Section 5.a.(3)(b) on page 17 of the draft maintenance plan refers to MACT standards and state rules as constituting RACT. The draft plan also refers to MACT for Olympia Sales, but EPA also incorporated the approval order for Olympia Sales into the SIP. It is not clear whether the State wants to remove the Olympia Sales approval order from the SIP. We have similar questions regarding Gadsby and Kennecott's Utah Power Plant, as well as stationary source control requirements contained in the EPA-approved PM₁₀ SIP.

The maintenance plan must clearly indicate which control requirements from the EPA approved SIP the State intends to retain and which control requirements the State proposes to delete. To the extent the State proposes to delete control requirements from the EPA-approved SIP, the State will need to provide an analysis showing that deletion will be consistent with sections 110(1) and 193 of the CAA. See 40 CFR 51.905(a)(4) and EPA's May 20, 2005 section 110(a)(l) maintenance plan guidance, response to question 10. Regarding section 110(1), the analysis should not be limited to 8-hour ozone, but should also consider potential effects on other pollutants. In addition, the State will need to retain any deleted control requirements on the list of potential contingency measures in the 8-hour ozone maintenance plan.

Staff response. The State of Utah is not removing any approved RACT measures found in any previous maintenance plan or SIP and is not decreasing the level of control. The specifics for each source are described below.

- a. Hill Air Force Base. RACT for HAFB was determined to be the level of control that existed at the base in 1995. EPA has interpreted this to mean that every approval order condition that existed in 1995 is a SIP condition that would require a SIP modification before a change could be made. This is an unworkable process, and was not what had been intended when the maintenance plan was adopted. The new plan describes RACT in a simpler way that is more stringent than the requirements that existed in 1995. Explanatory language has been added to the plan to explain why the change was made, and how the new way of describing RACT is more stringent than the previous plan.
- b. Olympia Sales. As explained in the plan, Olympia Sales is no longer a major point source because of emission reductions that were required by the MACT for wood furniture (40 CFR 63 Subpart JJ), which is a more stringent requirement than RACT (see note on page 17 of the maintenance plan).
- c. Gadsby. As explained in the plan, the emission limits that were established for the PM_{10} SIP were determined to meet RACT for the ozone plan. The new PM_{10} maintenance plan that was adopted in 2005 established a 24-hour plantwide NO_x limit for the Gadsby plant. This limit was based on an approval order that was issued in 2002 to allow the addition of three new natural-gas-fired turbines to the plant. Clarifying language has been added to the plan to explain that the current emission limitation for Gadsby is equivalent to the level that was determined to meet the RACT requirement in the old ozone maintenance plan.
- d. Kennecott's Utah Power Plant. As described in the maintenance plan, the previous RACT determination for this plant has been retained. Clarifying language has been added to the plan to specify the specific limitations for the four boilers that were established in the previous implementation plan.
- e. NO_x requirements in the PM₁₀ SIP. The old ozone maintenance plan referenced the NO_x emission reductions that had occurred as a result of the PM₁₀ SIP as further NO_x controls that contributed to maintenance of the ozone standard. These were not considered RACT, but were part of an overall demonstration that NO_x had been controlled in the area. EPA approved a NO_x RACT exemption for all sources except for the Kennecott Power Plant and the Gadsby Power Plant because the ozone nonattainment area was already meeting the ozone standard. In addition, modeling had demonstrated that the Salt Lake Valley was VOC limited and that NO_x reductions would not be the best approach in this area. The PM₁₀ maintenance plan has since been amended to focus the SIP limits on the larger emission units that were important for the PM₁₀ attainment/maintenance demonstration. The requirements for smaller sources were maintained in approval orders. Any future changes at these sources will be subject to Utah's new source review program that requires BACT as well as emission offsets for these smaller sources. The PM₁₀ maintenance plan demonstrates the effectiveness of these changes.

Comment #6: Page 20, under "Determination of the Contingency Trigger Level and Date," second paragraph, and page 21, under "Timeliness of Contingency Actions," second paragraph: Both of these paragraphs indicate that the contingency trigger date is the date that the AQB determines that one or more contingency measures—should be implemented. As indicated in our guidance, the trigger for implementation of contingency measures should, "at a minimum," be upon a monitored violation of the 8-hour ozone NAAQS. The proposed maintenance plan language does not meet this standard and must be changed to indicate that the date a monitored violation occurs is the trigger date for implementation of contingency measures. Our guidance further indicates that the schedule for adoption and implementation of contingency measures should be as expeditious as practicable, but no longer than 24 months.

Also on page 21, in the same paragraph noted, last sentence, the proposed language reads, "Unless otherwise directed, the necessary contingency measures will be adopted and implemented within eighteen months of the trigger date." The words "Unless otherwise directed" must either be removed or changed to read, "Unless a shorter period is prescribed." This change is necessary to ensure that adoption and implementation of contingency measures is not extended beyond 24 months.

Staff response. Staff agree. Wording in sections 6.b. and 6.c. has been modified to more closely follow the guidance provided by EPA. Specifically the first paragraph in section 6.c. now reads, "The date that certified data shows that a monitoring violation has occurred will be considered the contingency trigger date."

Also the words "Unless otherwise directed" have been deleted from the last sentence of the second paragraph of 6.c.

Comment #7: Page 21, under "Possible Contingency Measures": Of the seven identified contingency measures, five of these are voluntary and are unlikely to produce prompt, enforceable emission reductions to address a violation of the 8-hour ozone NAAQS.

EPA's May 20, 2005 guidance document entitled "Maintenance Plan Guidance Document for Certain 8-hour Ozone Areas Under Section 110(a)(l) of the Clean Air Act" states on page 5; "Contingency Plan - The State must develop a contingency plan that, at a minimum, will ensure that any violation of the 8-hour ozone NAAQS is promptly corrected." Further, in the response portion to question number 11 of our May 20, 2005 guidance, the first sentence states "The Phase I Rule requires the section 110(a)(1) maintenance plan for scenario B and C areas to include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs (51.905(a)(3)(iii) and (4)(ii))."

Voluntary measures, although beneficial, may or may not receive wide implementation. Therefore, the necessary emission reductions to promptly correct a violation of the 8-hour

ozone NAAQS may not occur. The State should only include contingency measures that would be of a regulatory nature such as, but not limited to; (1) increase the stringency of the cut points in the motor vehicle inspection and maintenance (I/M) programs, (2) revert back to an annual test rather than a biennial test in the I/M programs, and (3) evaluate and require Best Available Control Technology (BACT) for major sources of VOCs rather than only requiring RACT.

Staff response. The State feels that, because of the length of time required to develop rules and install controls, a certain amount of flexibility must be maintained in the choice of contingency measures. Explanatory language has been added to Section 6.d. of the maintenance plan that describes how the state intends to promptly correct any future violation(s) of the 8-hour ozone standard. The State is committed to quickly apply appropriate controls to meet the NAAQS.

Comment #8: Page 23, under 7.a: The maintenance plan needs to be more specific than just say the inventories will be updated "periodically." If you will continue to follow a three-year schedule, the maintenance plan should indicate that the inventories will be updated at least once every three years.

Staff response. Staff agree. The third sentence in section 7.a. has been changed to read:

To verify continued maintenance, the State will update the VOC and NO_x emission inventories for Salt Lake and Davis Counties *at least once every three years*.

Comment #9: Page 23, under 7.b, second sentence: As reflected in our May 20, 2005 guidance, response to question 9, Section 110(a)(1) maintenance plans remain in effect indefinitely, not just for 10 years. The language of the maintenance plan must be changed to indicate that the maintenance plan will remain in effect even after 2014. The maintenance plan can only be modified or removed from the SIP through the SIP revision process, with EPA's approval.

Staff response. Staff agree. The last two sentences in section 7.b. have been changed to read:

It is understood that maintenance plans approved under section 110(a)(1) remain in effect until *amended or repealed*. It is further understood that contingency measures approved as part of 110(a)(1) maintenance plans will remain in effect and that they could still be triggered if an area violates the 8-hour standard after 2014.

Response to other comments on the Proposed 8-Hour Ozone Maintenance Plan

Comment #10: [Wasatch Clean Air Coalition] Please consider adding tracking and developing strategies to reduce highly reactive VOC's. According to EPA, "an approach that discriminates between VOCs based on reactivity is likely to be more effective and efficient. In particular, reactivity based approaches are likely to be important in areas for which VOC control is a key strategy for reducing ozone concentrations. Such areas include: ... Urbanized or other NO_X-rich areas where ozone formation is particularly sensitive to changes in VOC emissions."

This SIP revision is an effort to meet federal NAAQS requirements. However, California recently calculated that, "An estimated 630 deaths [in California] (probable range: 310 to 950) avoided annually if the 8-hour standard of 0.070 hour is attained." A simple comparison of population indicates that 40 Utahns could be saved from premature death if Utah met the standards California is proposing. Other benefits would be decreased hospital and emergency room visits, reduced school absenteeism and new cases of asthma.

Efforts to reduce ozone below current NAAQS will serve all Utahns, and represents a worthy goal for DAQ's efforts. Tracking and developing strategies to reduce highly reactive VOC's is one action Utah could pursue to reduce ozone levels in Utah, even without the trigger of a NAAQS violation.

Staff response. This comment references EPA's <u>Interim Guidance on Control of Volatile Organic Compounds in Ozone State Implementation Plans</u> (70FR 54046, September 13, 2005). The guidance summarizes preliminary scientific findings and encourages innovative state applications of reactivity information in the development of VOC control measures. It applies to states or areas currently in an ozone <u>non-attainment</u> status. Utah is in an attainment status.

In this document, EPA states that, "The photochemical reactivity of a compound is a measure of its potential to form ozone. By distinguishing between more reactive and less reactive VOCs, it should be possible to decrease ozone concentrations further or more efficiently than by controlling all VOCs equally." It goes on to say that, "Discriminating between VOCs on the basis of their contributions to ozone formation, or reactivities, is not straightforward. Reactivity is not simply a property of the compound itself; it is a property of both the compound and the environment in which the compound is found. The absolute reactivity of a single compound varies with localized VOC-NO_x ratios, meteorological conditions, the mix of other VOCs in the atmosphere, and the time interval of interest."

Currently, research in both Texas and California is beginning to develop innovative VOC reactivity information that may lead to future control measures. Utah intends to monitor this research and to apply any findings that might be applicable if future VOC reductions are needed. The ozone RACT rules have been an effective part of the overall plan to

bring the area into attainment. If future ozone problems occur then all of the ozone control strategies will be reviewed to identify the most effective ways to further reduce VOC emissions. No changes to the rules have been made at this time to increase the stringency of the rules.

EPA Comments on the Technical Support Document (TSD)

Comment #1: Volume 2, section 3.1.2.2.22, "Fuel Distribution", untitled table at the top of page 3.1.2.2.22-3: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi.

Staff response. All refineries in Utah currently sell gasoline in Salt Lake and Davis Counties during the summer months with a Reid vapor pressure (RVP) of 7.8 psi. The value for Reid vapor pressure in the untitled tables at the top of pages 3.1.2.2.22-3 and 3.1.2.2.22-4 are for calculation of annual emissions. The ozone season RVP discussion begins on page 3.1.2.2-4. In this section the RVP has been changed to 7.8 psi. Calculations that were made using a RVP of 10.6 psi have been revised using the value of 7.8 psi. It should be noted that the original calculations using the 10.6 psi RVP also used an "average annual temperature." The revised calculations using the 7.8 psi RVP incorporated the "peak ozone season day" temperature as defined in volume IV of the mobile source document, "Procedures for Emission Inventory Preparation." As a result of these changes, the "Fuel Distribution with RE" category in the area source inventory, changed by a small fraction. These corrected values for the area source category "fuel distribution with RE" have been reflected in the area source data and the associated VOC demonstration graphs.

Comment #2: Volume 2, section 3.1.2.2.22, "Fuel Distribution", untitled table at the top of page 3.1.2.2.22-4: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, two column headings in this table may have typographical errors in that they indicate emission factors with and without "Stage II." As Utah does not implement Stage II vapor recovery, these column labels should likely be "Stage I."

Staff response. See response to comment #1. The incorrectly labeled column headings have been changed to read with and without Stage I.

Comment #3: Volume 2, section 3.1.2.2.22, "Fuel Distribution", "111. Sum the Vapor Loss Factors - - -: Untitled table at the bottom of page 3.1.2.2.22-10: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, column headings in this table may have typographical errors in that they indicate emission factors with and without Stage II, shown as "with S2VR" and "w/o S2VR." As Utah does not implement Stage II vapor recovery, these column labels, and associated emission factors, should likely be "Stage I."

Staff response. Similar to response to comment #1. In this case the table on page 3.1.2.2.22-10 is addressing annual emissions. The ozone season RVP discussion begins on page 3.1.2.2.22-17 and the ozone season table with the 7.8 psi RVP is on page 3.1.2.2.22-19. The incorrectly labeled column headings have been changed to read "with S1VR" and "without S1VR."

Comment #4: Volume 2, section 3.1.2.2.38, "Surface Coatings Traffic Markings": We are curious as to why actual lane-mile data were used from 1995 through 1998, but actual data from 2002 were not considered.

Staff response. Staff used actual lane-miles from 1995 through 1998 because that is what DAQ was provided by the Utah Department of Transportation (UDOT). In 2002, UDOT did not provide actual lane-miles.

Comment #5: Volume 5, "Projections", section 3.1.3.1.22, "Fuel Distribution", untitled table at the top of page 3.1.3.1.22-3: The value for the conventional gasoline Reid Vapor Pressure "RVP" listed in this table for the Salt Lake and Davis Counties maintenance area for a summer time emission inventory is shown as 10.6. This is incorrect as by regulation, the summer time RVP for conventional gasoline in the Salt Lake Davis Counties maintenance area is 7.8 psi. Also, same comment for the table at the top of page 3.1.3.1.22-4, and two column headings in this table may have typographical errors in that they indicate emission factors with and without "Stage II." As Utah does not implement Stage II vapor recovery, these column labels should likely be "Stage I."

Staff response: Similar to response to comment #1. In this case the value for Reid vapor pressure in the untitled tables at the top of pages 3.1.3.1.22-3 and 3.1.3.1.22-4 are for calculation of annual emissions. The ozone season RVP discussion begins on page 3.1.3.1-4. The incorrectly labeled column headings for the table at the top of page 3.1.3.1.22-4 have been changed to read with and without Stage I.

Comment #6: Volume 5, "Projections", section 3.1.3.1.38, "Surface Coatings Traffic Markings": We are curious as to why actual lane-mile data were used from 1995 through 1998, but actual data from 2002 were not considered.

Staff response: See response to comment #4 above.